



Product Evaluation

DR799 | 1116

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: DR-799

Effective Date: November 1, 2016

Re-evaluation Date: November 2020

Product Name: Series SI 3350 Impact FGW Aluminum Folding Glass Wall Systems (3' x 8' Panels), Impact Resistant

Manufacturer: Solar Innovations, Inc.
31 Roberts Road
Pine Grove, PA 17963
(570) 915-1500

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series SI 3350 Impact FGW; 3' x 8' Panel; Out-Fold Aluminum Folding Glass Wall (with Panic Hardware); XXXXXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+65 / -65 psf
2	Series SI 3350 Impact FGW; 3' x 8' Panel; In-Fold Aluminum Reinforced Folding Glass Wall; (with and without ADA Sill); XXXXXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+80 / -80 psf
3	Series SI 3350 Impact FGW; 3' x 8' Panel; Out-Fold Aluminum Reinforced Folding Glass Wall; (with and without ADA Sill) XXXXXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+80 / -80 psf
4	Series SI 3350 Impact FGW; 3' x 8' Panel; Radius In-Swing Aluminum Folding Glass Wall XXXXXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+70 / -70 psf
5	Series SI 3350 Impact FGW; 3' x 8' Panel; In-Fold 90° Corner (No Post) Aluminum Folding Glass Wall XXX/XXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+80 / -80 psf
6	Series SI 3350 Impact FGW; 3' x 8' Panel; Out-Fold 4-Panel Aluminum Folding Glass Wall XXXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+80 / -80 psf

Product Dimensions:

System	Overall Size	Maximum Panel Size	Maximum Glass Daylight Opening Size
1	223" x 100-1/2"	36" x 96"	29" x 89"
2	223" x 100-1/2"	36" x 96"	29" x 89"
3	223" x 100-1/2"	36" x 96"	29" x 89"
4	216-1/8" x 100-1/2"	36" x 96"	29" x 89"
5	223" x 100-1/2"	36" x 96"	29" x 89"
6	150" x 100-1/2"	36" x 96"	29" x 89"

Product Identification (Certification Agency Label on Door):

System		
1	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 3350 Impact FGW 3 X 8 Panel Aluminum Folding Glass Wall with Panic Hardware
	Test Standards	TAS 201/TAS 202/ TAS 203
2	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 3350 Impact FGW 3 X 8 Panel In-Fold Aluminum Folding Glass Wall
	Test Standards	TAS 201/TAS 202/ TAS 203
3	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 3350 Impact FGW 3 X 8 Panel Out-Fold Aluminum Folding Glass Wall
	Test Standards	TAS 201/TAS 202/ TAS 203
4	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 3350 Impact FGW 3 X 8 Panel Radius In-Swing Aluminum Folding Glass Wall
	Test Standards	TAS 201/TAS 202/ TAS 203
5	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 3350 Impact FGW 3 X 8 Panel 90° Corner Aluminum Folding Glass Wall
	Test Standards	TAS 201/TAS 202/ TAS 203
6	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 3350 Impact FGW 3 X 8 Panel Out-Fold Aluminum 4-Panel Folding Glass Wall
	Test Standards	TAS 201/TAS 202/ TAS 203

Fabrication and Assembly: Solar Innovations Inc. Series SI 3350 Impact FGW Aluminum Folding Glass Wall Systems (3' x 8' Panels) are fabricated in the factory. The assemblies are assembled and glazed at the jobsite. The approved drawings referenced in this evaluation report indicate the options for the glazing construction.

Impact Resistance:

System	Impact Resistant	Requirement
1, 2, 3, 4, 5, 6	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. The products passed an impact criteria equivalent to Missile Level D in ASTM E 1996-04. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

Installation:

Design Drawings: The aluminum folding glass wall systems must be installed in accordance with following listed drawings. The listed drawings will be referred to as the approved drawings in this evaluation report:

System	Drawing
1	Drawing No. 08-01845, titled "SI 3350 Outfold Aluminum Reinforced FGW, 3 x 8 Panel", Sheets 1-16, dated September 19, 2012, signed and sealed by Luis R. Lomas, P.E., on October 3, 2012.
2	Drawing No. 08-02656, titled "SI 3350 FGW, 3 X 8 Panel, In-Fold Aluminum Reinforced-Impact", Sheets 1-15, dated March 23, 2015, signed and sealed by Luis R. Lomas, P.E., on March 24, 2015.
3	Drawing No. 08-02657, titled "SI 3350 FGW, 3 X 8 Panel Outfold Aluminum Reinforced-Impact-HVHZ", Sheets 1-16, dated March 23, 2015, signed and sealed by Luis R. Lomas, P.E., on March 24, 2015.
4	Drawing No. 08-02655, titled "SI 3350 FGW, 3 X 8 Panel Radius In-Swing, Folding Glass Wall - Impact, Sheets 1-14, dated March 23, 2015, signed and sealed by Luis R. Lomas, P.E., on March 23, 2015.
5	Drawing No. 08-02654, titled "SI 3350 FGW, 3 X 8 Panel 90° Corner, No Post, Folding Glass Wall-Impact", Sheets 1-16, dated March 23, 2015, signed and sealed by Luis R. Lomas, P.E., on March 23, 2015.
6	Drawing No. 08-02653, titled "SI 3350 FGW, 3 x 8 Panel, Out-Fold Aluminum Folding Glass Wall-Impact", Sheets 1-14, dated March 23, 2015, signed and sealed by Luis R. Lomas, P.E., on March 23, 2015.

Wall Framing Construction: The assembly may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,192 psi)
- Wood dimension lumber (minimum Spruce-Pine-Fir, G≥0.42)
- Masonry (ASTM C-90, Grade N, Type 1 or greater)
- Steel (18 gauge, 33 ksi)
- Aluminum (6063-T5, 1/8" thick minimum)

Installation:

- The assemblies are installed in accordance with the approved drawings.
- The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.